

TITLE OF THE INVENTION:

Comfort Optics Visor



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7-31-01
R. G. G. G.
N.E.

CROSS REFERENCES TO RELATED APPLICATIONS

There are no cross references to related applications

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT

There was no Federally-Sponsored Research and Development connected to this invention.

REFERENCE TO A MICROFICHE APPENDIX

This invention has no microfiche appendix

BACKGROUND OF THE INVENTION

Field of the Invention

Optics

Description of the Related Art

The only related art is Patent No. 5,920,371. Some of the pieces of the art work are similar in that both inventions use a visor to hold them on the person's head (this visor is not the subject of either patent as there are many brands of visors available and neither that inventor or I am claiming to have developed the visor. The part of my device that is unique and therefore patentable is the alignment device which is very different from the alignment device shown is Patent no. 5,920,371. My device is designed to allow the patient to adjust the alignment himself/herself with no help from a caretaker or doctor. The alignment device shown in the prior art could not be adjusted by the patient. My invention features the elongated ports in the visor which work with my unique alignment fixture, a clamp, to allow the patient to adjust the vision simply by applying pressure to the expansion loop. The prior art has a very different alignment fixture and this is the key to the difference in the two inventions.

BRIEF SUMMARY OF THE INVENTION

When pressure is applied to the expansion loop, the headband expands. The pressure may be applied by hand or a surgeon's arm or by another person (a caretaker for a disabled person, e.g.). When the pressure is released, the headband contracts and the (2) two bands on either side of the head align the visor optically the same way every time. No further adjustment need be made for perfect optical alignment.

My application for a patent concerns the expansion loop, which is totally new. Headbands and visors have been made for a long time. Many brands already exist and my invention does not affect those already existing patents. I have developed a unique concept for an expansion loop that provides optical alignment every time pressure on it is removed and replaced.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The following describes the drawings of my invention fully:

Figure 1: the top view of the headband shows an expansion loop (right on top of band). The fastener that allows adjustment and secures the visor to the headband and the expansion loop. This part is adjustable so it will fit the patient's requirements.

Figure 2: the front view of the headband shows four attached bands that achieve perfect optical alignment. (fasteners in front)

Figure 3: the side view of the headband shows a fastener that allows adjustment and secures the visor to the headband, the attached bands, and the expansion loop.

Figure 4: the front view of the visor shows the visor's elongated mounting ports to accommodate either fixed, adjustable mechanical or electronic monoculars. The elongated parts allow for adjustment to the patient's center distance.

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Figure 5: the side view of the visor shows an elongated bracket in the front. This bracket is elongated to allow for proper adjustment alleviation of any cantilever effect from heavy monoculars. It maintains stability.

Figure 6: the front view of the alignment adjuster shows a fixture that is temporarily attached to the visor, allowing the patient to independently adjust each monocular to achieve the maximum vision the patient can obtain. It is used to rotate the monocular to achieve superimposure using roof-top prismatic monocular. When alignment is achieved, the fixture is removed.

Figure 7: the front view of the alignment clamp shows a clamp that is attached to the monocular, while being held in place by Figure 6, to maintain alignment. If patient's center vision is lost, the peripheral vision can be superimposed over the primary vision.

Figure 8: the top view of the beveled adjuster shows a bevel that converts a view visor into a reading visor. The splines maintain the correct angularity for reading.

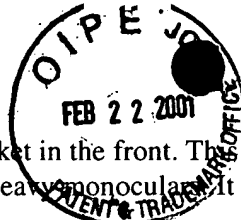
Figure 9: the side view of the beveled adjuster.

This is a utility claim, not a design claim. Everything herein has been reduced to practice.

DETAILED DESCRIPTION OF THE INVENTION

The Comfort Optic Visor is a novel unique optical device, never offered before. Its novel and unique features are as follows:

1. The patient is not strapped with tunnel vision. They have their normal vision and to get assistance by the additional power optics, all they have to do is tip their head 15 degrees and they have the best optical assistance their body possesses.
2. To remove and replace the comfort optic visor and achieve perfect vision every time, all the patient has to do is apply pressure to the expansion loop on the head band. When the pressure is removed, the visor is in perfect optical alignment. When a surgeon needs additional optical assistance, he can align the comfort optical vision with his arm and does not have to worry about contamination.
3. The elongated ports in the visor, with the aid of the alignment fixture, allows the patient to achieve perfect optical balance and not have to accept what someone guesses is correct for the patient.
4. The Comfort Optic Visor is the only optical device ever offered where the patient does all the selection, adjustment and alignment. Nobody can do it better than the patient.
5. The Comfort Optic Visor is fitted with various power monoculars. They are extra close focus to infinity with roof-top prism. If the patient has no primary vision, only preferred vision, no matter how narrow the threshold of sight may be, the patient can locate this threshold and prismatically take the preferential vision and superimpose this vision to a primary vision. No other device can do this in a way that is achieved by the patient himself/herself.
6. The Comfort Optic Visor is the only device that allows the patient to adjust the pupil to the primary optic. This is very critical for some patients. Without this feature some patients would never be able to see.



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CLAIM OR CLAIMS

These are the claims for my invention.

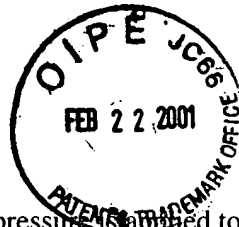
1. The expansion loop on the headband, when pressure is applied to it, causes the headband to expand and the ear on the sideband achieves optical alignment when the pressure is relieved from the expansion loop.
2. The elongated ports in the visor, with the use of the alignment fixture, allow the patient to achieve perfect center visual alignment while the monoculars are being held in the correct position by the alignment fixture and the rotating fixture allows the patient to achieve perfect prismatic alignment.

ABSTRACT OF THE DISCLOSURE

The Comfort Optic Visor is a device used to correct vision in individuals with only peripheral vision. It consists of a headband and monoculars which can be adjusted by the patient using the unique clamp to align the prism. The clamp can be rotated easily and will then cause alignment from peripheral vision to primary vision.

DRAWINGS

The drawings are shown on the following nine pages.



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